

N<sup>o</sup> 27,812



A.D. 1904

*Date of Application, 20th Dec., 1904*

*Complete Specification Left, 4th Oct., 1905—Accepted, 14th Dec., 1905*

PROVISIONAL SPECIFICATION.

**“ An Improved Pneumatic Truss for Personal Wear.”**

I JAMES JORDAN SHERMAN Berwood Farm, Chester Road Erdington, Birmingham, in the County of Warwickshire Engineer do hereby declare the nature of this invention to be as follows:—

A thin rubber bladder, and a detachable outer casing, of any suitable material, preferably a washing material. A flat steel spring made to the shape of outer casing is fixed to same, by means of the edges of the said outer casing, being turned over the forementioned spring, and secured there. This spring contains two small projections; a narrow opening is cut in each side of the outer casing, to allow of the said projections to pass through. By these means, the outer casing can be securely fixed to the steel or other suitable plate, which is made to the shape of truss pad, having the edges turned down perpendicular from the said plate; these edges contain two small slots. By this means the outer casing can be attached to the said plate, by simply pinching the flat spring to allow of same passing inside the perpendicular edges of plate, and the projections will pass, when loosed, into the said slots. An inner collar can be made in the forementioned outer casing, as a second means of securing same, whereupon inflating inner bladder the pressure of air, will press the said collar tightly to the plate. Hence the outer casing can be fastened by each of the said mentioned ways, separately; or together if necessary. This pad can be attached to the elastic belt, or to the steel truss band, by means of two threaded studs. A hole is made through the centre of said plate to allow the small valve which is attached to the inner bladder, to pass through same, likewise a hole in belt is made, to allow of the valve passing through. To detach pad, the valve nut is unscrewed to release the air, the flat spring attached to the outer casing is pinched until the projections are clear of the slots, and the pad is detached. The soiled casing is taken off, and replaced by a clean one, in a few seconds.

Dated this 19th day of December 1904.

JAMES JORDAN SHERMAN.

30

COMPLETE SPECIFICATION.

**An Improved Pneumatic Truss for Personal Wear.**

I JAMES JORDAN SHERMAN Engineer. of Hurst Green, Minworth, Birmingham in the County of Warwickshire “formerly of” Berwood Farm, Chester Road, Erdington, Birmingham, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

It consists of a thin rubber bladder and a detachable outer casing of any

[Price 8d.]



*Sherman's Improved Pneumatic Truss for Personal Wear.*

suitable material, preferably one that will wash. A steel spring made to the shape of outer casing is attached to same by means of the edge of the said outer casing being turned over the forementioned spring and secured there. A metal or other suitable plate, which is made to the required shape for individual ruptures, the edge of which is turned up all around. It has been found that a round steel spring is most suitable, fixed to the said plate by passing the spring under a circular recess, formed inside the turned up edge of forementioned plate.

A hole is made through the centre of plate to allow of the small valve, which is attached to the inner bladder to pass through, a thin nut regulates the valve which projects through the said plate.

This pneumatic pad being pliable, and substantially constructed, is a most ease giving, reliable, and perfect pneumatic truss; and the simplicity of removing the outer casing has received great consideration, which can be instantly removed, replaced, and inflated by the ordinary cycle pump; and should an accidental puncture occur, can be repaired by the ordinary cycle outfit; it is very light and neat nothing projecting beyond the stud fastening.

This pneumatic pad can be fixed to the steel truss band, or to the elastic belt, by means of two threaded studs, so that every part can be readily detached.

To remove pad, the valve nut is unscrewed to release the air, the outer case pinched so as to allow the spring to become clear of the edge of plate.

“SUMMARY DESCRIPTION OF THE DRAWINGS”:

- A Valve stem.
- B Lock nut.
- C Nut for regulating valve.
- D Metal fixing plate.
- E Truss steel spring band.
- F Round steel spring attached to outer casing.
- G Outer casing.
- H Inner tube, thin rubber bladder.
- K Studs threaded.
- L Valve nut.
- M Holes tapped for threaded studs.

Having now particularly described and ascertained the nature of my said invention, and in what manner the same is to be performed, I declare that what I claim is:—

- (1) The combination of parts to be used for the purpose, and in the manner described in my specification and drawing.
- (2) The improved truss consisting of a metal plate made to the required shape for individual ruptures, with detachable outer casing substantially as herein-before mentioned.
- (3) The method of fastening throughout substantially as herein set forth.

Dated this 21st day of September 1905.

JAMES JORDAN SHERMAN.



FIG. 1.

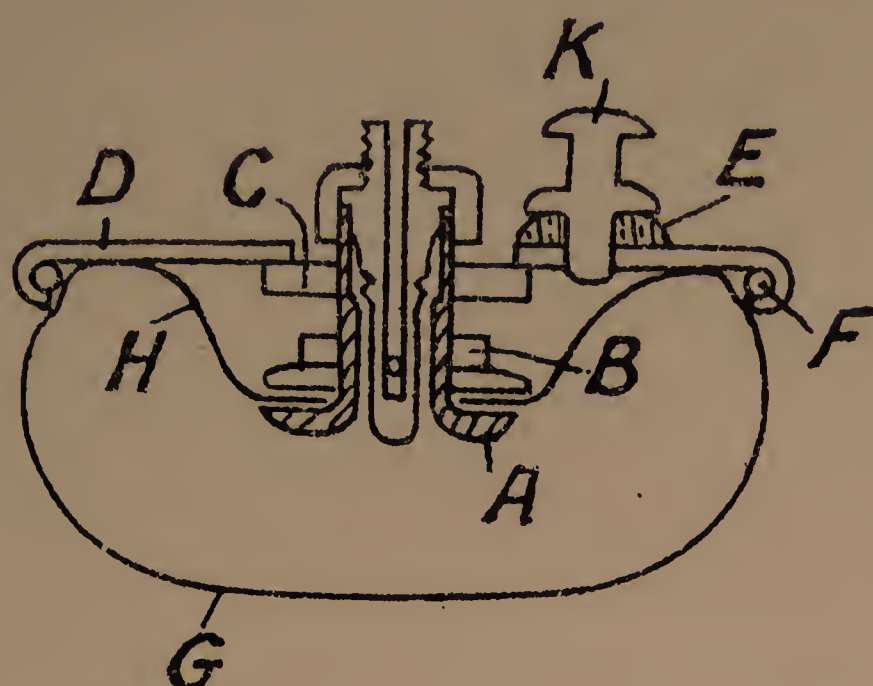


FIG. 2.

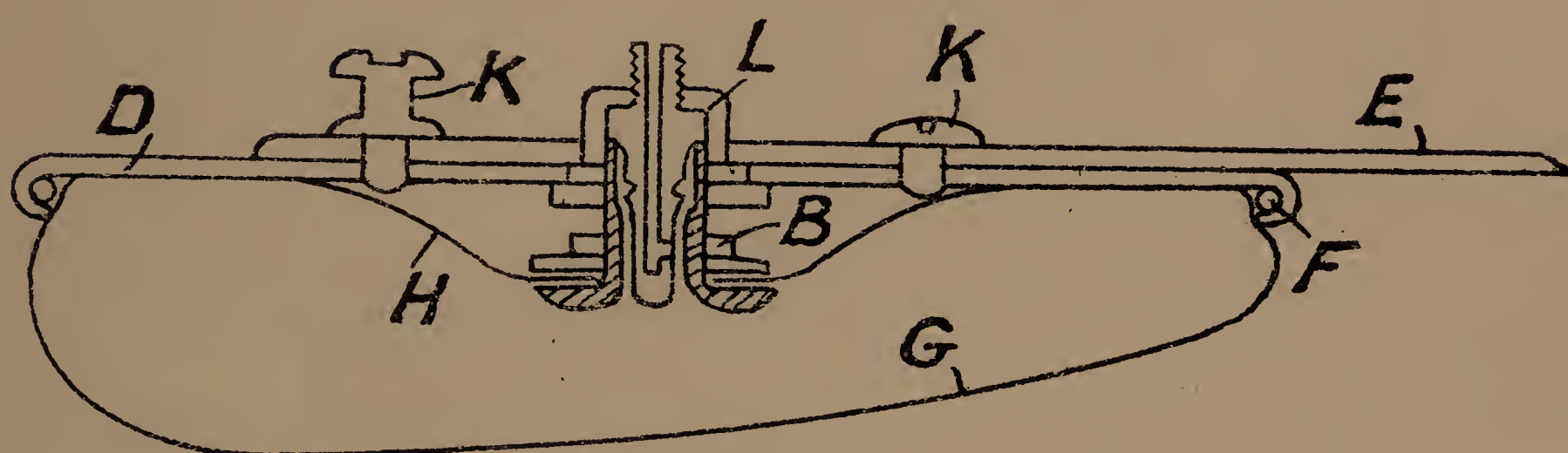
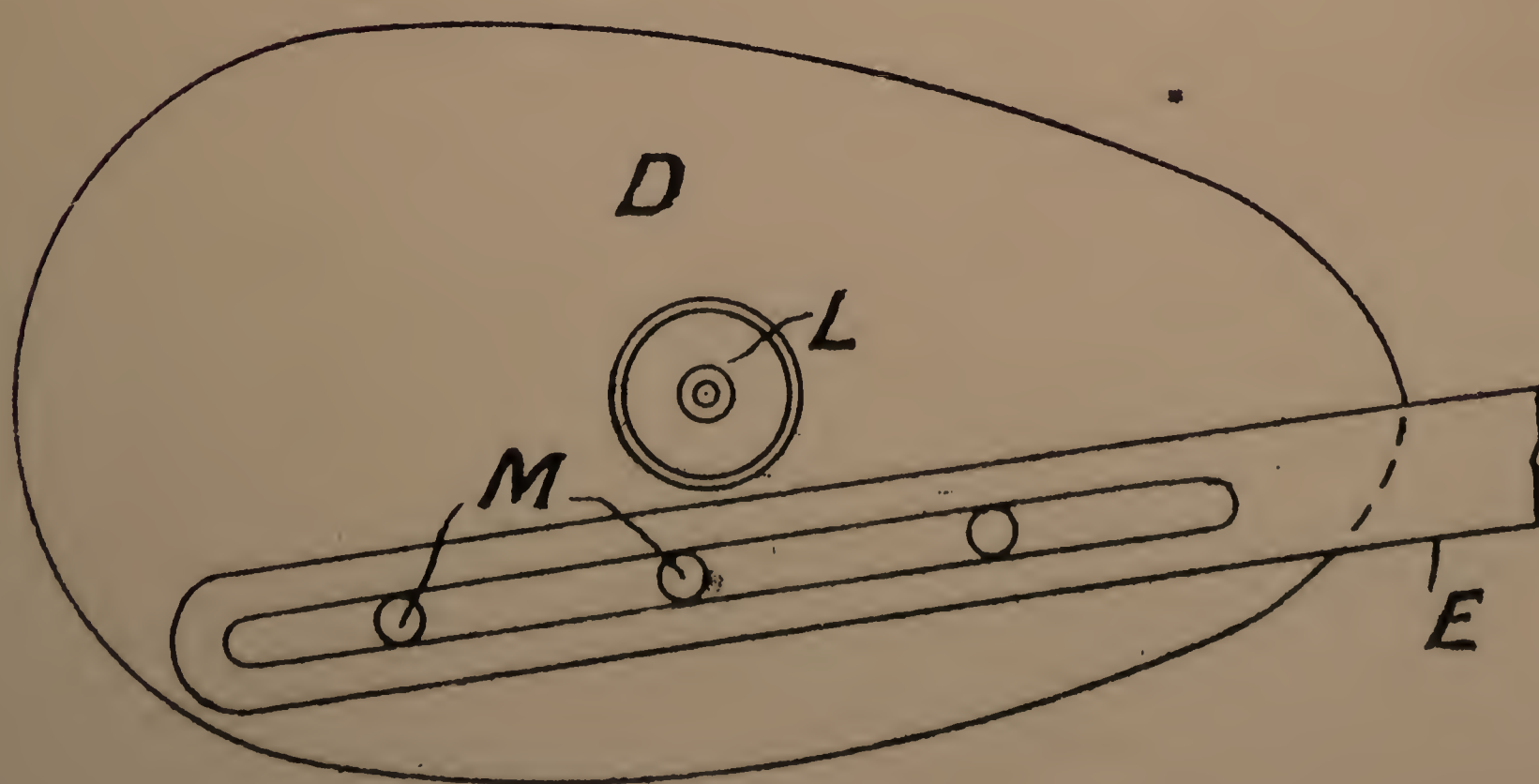


FIG. 3.



[This Drawing is a full-size reproduction of the Original.]



